

### REMARKS

Reconsideration of this application is respectfully requested. The independent claims have been amended to clarify that recognition of elements, for automatic interactive trigger insertion, is done on unmodified broadcast data stream. These amendments are supported by the specification as filed, for example, in paragraph [0018]. Accordingly, no new matter is added.

- 1. Claims 1-2, 7-8, 10-12, 17-18, 20-22, 27-31, and 36-40 are patentable over Reynolds, because Reynolds does not describe recognizing one or more elements in an unmodified broadcast data stream and, prior to broadcasting, automatically inserting interactive triggers based on this recognition.**

Reynolds, U.S. Patent Application Publication No. 2001/0037500, describes a system for selectively substituting one set of meta data (e.g., meta data applicable to a local broadcast) in place of another set of meta data (e.g., meta data applicable to a national broadcast) into an incoming data stream. Such substitution is done after stripping the original meta data from the incoming data stream (see, e.g., Reynolds Figure 2 and its accompanying text).<sup>1</sup>

Inherent in this scheme is the fact that meta data (e.g., national meta data) needs to be inserted into the original broadcast stream before alternative meta data (e.g. regional or local meta data) can be substituted therefore. (Reynolds Figure 4). In other words, prior to the first broadcast of a data stream, that data stream must be modified by the introduction of a first set of meta data before it is broadcast. In these scheme described by Reynolds, this insertion of a first set of meta data in the broadcast stream is not performed automatically according to recognition of any elements in an unmodified broadcast stream. Further, the later regional or local meta data substitution operations are not performed on unmodified broadcast streams, but rather on a modified data stream (i.e., one containing the national meta data). Therefore, Reynolds cannot be said to teach or suggest “recognizing one or more elements in an unmodified

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<sup>1</sup> In one example described by Reynolds, after a national broadcaster has initiated the broadcast signal, a regional broadcaster has the opportunity to modify or substitute data into the broadcast via a meta data substitution unit prior to distributing the broadcast signal to the regional viewing audience. Reynolds at ¶ 0028. A local broadcaster can then perform a similar meta data substitution, if desired, before the broadcast program is passed to the local viewing audience. *Id.* Thus, Reynolds teaches a mechanism to tailor meta data in a broadcast stream to the intended viewing audience.

broadcast data stream and prior to broadcasting, automatically inserting an interactive TV trigger into the broadcast data stream based on the recognized elements” as presently recited in independent claims 1, 11, 21, 30 and 39.

Consequently, these independent claims and their respective dependent claims are patentable over Reynolds.

**2. Claims 3-6, 13-16, 23-26 and 32-35 are patentable over Reynolds even in view of Goldschmidt, because the combination still fails to describe recognizing one or more elements in an unmodified broadcast data stream and automatically inserting interactive triggers based on this recognition.**

Claims 3-6, 13-16, 23-26, and 32-35 depend on claims allowable over Reynolds, as discussed above. Goldshmidt, U.S. Patent No. 6,601,103 is cited for describing a system that recognizes voice, video, text elements, etc. Even if true, however, combining that description with Reynolds will not yield the present invention, in as much as such a combination would still not provide for “recognizing one or more elements in an unmodified broadcast data stream and prior to broadcasting, automatically inserting an interactive TV trigger into the broadcast data stream based on the recognized elements” as presently claimed.

Goldshmidt discusses a system for providing supplemental programming based on user provided criteria. (Goldshmidt Abstract, Claim 1). There is no mention of automatically inserting interactive TV triggers into unmodified broadcast data stream based on recognized elements in Goldshmidt. Moreover, the recognition that does take place in the system described by Goldshmidt occurs at individual user terminals where the supplemental programming is introduced. (Goldshmidt col. 3 ll. 49-59). This is quite different from the presently claimed systems and methods in which one or more elements in an unmodified broadcast data stream are recognized and, prior to broadcasting, an interactive TV trigger is automatically inserted into the broadcast data stream based on the recognized element. Hence, the reasons advanced in favor of patentability of the claims over Reynolds also apply to the combination of Reynolds and Goldshmidt.

**3. Claims 9 and 19 are patentable over Reynolds even in view of Kaiser, because the combination still fails to describe recognizing one or more elements in an unmodified broadcast data stream and automatically inserting interactive triggers based on this recognition.**

Claims 9 and 19 depend on claims allowable over Reynolds for the reasons discussed above. Kaiser, U.S. Patent No. 6,615,408 is cited for describing a system that automatically inserts interactive TV trigger into the broadcast stream within a receiver. Even if true, however, combining that description with Reynolds will not yield the present invention, in as much as such a combination would still not provide for “recognizing one or more elements in an unmodified broadcast data stream and prior to broadcasting, automatically inserting an interactive TV trigger into the broadcast data stream based on the recognized elements” as presently claimed.

Kaiser discusses a system for providing action selections to an image referencing a product in a video production. The video productions already include triggers that the trigger interpreter interprets (Kaiser col. 8 ll. 1-23, claim 1, 2 and 3). Thus, there is no teaching of automatically inserting interactive TV triggers into unmodified broadcast data stream based on recognized elements in Kaiser and the reasons advanced in favor of patentability of the claims over Reynolds also apply to the combination of Reynolds and Kaiser.

For all of the foregoing reasons, the claims are patentable over the references cited in the Office Action. If there are any additional fees due in connection with this communication, please charge our deposit account no. 19-3140.

Respectfully submitted,

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